

August 11, 1950.

Dear Gordon:

Thanks for sending your MS and explanatory letter. Frankly, the MS is rather difficult to understand, and I suspect might give other workers not familiar with K-12. I hope your more pressing duties will leave you enough time to polish it; if not, by all means send it in as is.

Perhaps I can help point out the most obscure lines.

p.1 line 15 you should write: so that (B-) M-P-T/L/B₁/ X

17 How do you mean identified as ...P-B1-? Did you confirm the latter first, or did you plate all the colonies and ignore those which turned out not to be P-B1-?

2 line 7 What were the markers? Solely nutritional? It would do no harm at all to tabulate them.

Your dismal conclusions do seem to be justified by the experimental data summarized. I think that possibly the failure with S-Az selection might be due to an absence of S^r segregants (like Mal^r) if S^r is introduced with ~~the~~ the M- parent.

Thank you for correcting my misimpression of the nutritional complementaries. Frankly, I feel that this is the most important direction of your work, since mapping is a bit futile if the condition of statistical complementarity is not fulfilled. In particular, this might provide the best objective criterion for which factors, if any, can be mapped in any real sense. The statistical complementaries are also an indispensable guide to how to look for twin-complementaries. If you do spend another month cleaning this up, I hope you will have time to compare P-B1-T/L/A^r/ with P/B1/T-L-M- in respect to the unselected markers from crosses such as (B-)M-P- x W-677 S^r. From being a bit away from the work this summer I am convinced that we will have to start from scratch again to determine whether eliminations, and similar aberrations, are characteristic of all K-12 derivatives. Without Het, diploids may be too difficult to obtain to test this point, and some information on statistical complementaries may be essential. So you can see how tantalizing your tidbits on this point have been.

Bernie wrote Stanier that his course is nearly over and that he will be visiting here next weekend. Perhaps he'll have some angles too.

Sincerely,

Joshua Lederberg